

## **REMARKS**

### **I. Claim Amendments**

Last January, subsequent to a review of the claims in the present application and a search of the art, Applicants' attorney was contacted by Examiner Bradley to discuss potential subject matter and claim amendments that the Examiner would deem allowable. Applicants' summary of that interview is also included herewith.

Essentially, Examiner Bradley determined that preferred 5-mer and 7-mer peptides, as well as their use for targeting cells, were free of the art where limited to a particular peptide, i.e., PALKT (SEQ ID NO: 6) or peptides up to 30 amino acids in length that included the preferred peptide sequences, i.e., PSNST (SEQ ID NO: 8), PPNTT (SEQ ID NO: 9), STPPNTT (SEQ ID NO: 17), APSNSTA (SEQ ID NO: 15), and SPALKTV (SEQ ID NO: 16). With the Examiner Interview Summary dated January 28, 2010, Examiner Bradley kindly provided a complete set of proposed amended claims, the subject matter of which was deemed free of the prior art.

Although Applicants did not initially accept the proposed amendments, after closer study of the publications cited in the Office Action of February 23, 2010, Applicants introduce claim amendments herein which substantially adopt the patentability rationale earlier expressed by the Examiner.

In addition, to reflect claim language proposed by the Examiner in, for instance, Claim 51, which is directed to a non-viral transfection mixture including the peptides of the present invention, Applicants have amended Claim 12 to specifically recite "a polypeptide up to 30 amino acids" and specified that said peptides are capable of targeting dendritic cells and that said peptides are not full-length, naturally-occurring proteins. Applicants believe Claim 12 as amended does not read on any of the art cited by the Examiner in the Office Action, which art discloses the presently-claimed peptides only as amino acid sequences within larger naturally-occurring proteins and none of the reference proteins are disclosed as possessing dendritic cell-targeting capability. Support for the amendments to Claim 12 may be found throughout the specification, for example, page 7, line 33-35, page 20, lines 11-16, and Example 4 beginning on page 88, line 27.

Applicants respectfully assert that the claims as amended herein are clearly distinguished from the art cited in the Office Action of February 23, 2010. Claim 12 has been amended to recite a non-naturally occurring polypeptide comprising up to 30 amino acids for targeting to dendritic cells. Peptide PALKT (SEQ ID NO: 6) which is allegedly disclosed in Hallbrink et al. as a cell-targeting peptide has been deleted from Claim 12. Claims 35, 51, 65, 80, 97, 98, 99, 100, 101, and 105 have been amended to conform to the subject matter identified as being free of prior art at the time of the telephone interview of January 28, 2010.

Also, as per the Examiner's suggestion, Claims 1, 2, 13, 32, 84, 106, 107, and 110 have been canceled.

Applicants hereby expressly reserve the right to pursue the subject matter of any canceled claim in a continuing application.

Applicants respectfully request that the enclosed amended set of claims be entered and considered on the merits.

## **II. Response to Restriction Requirement**

In the Office Action mailed February 23, 2010, the Examiner alleges that the application contains claims directed to more than one invention and that these inventions are deemed to lack unity because they are not so linked as to form a single general inventive concept under PCT Rule 13.1. According to the Examiner,

"The invention listed as Groups I-XV [sic, XVI] do not relate to a single general inventive concept under PCT rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: peptides comprising the amino acid sequence PX1X2X3T (SEQ ID NO: 1) wherein X1 is S, A or P, X2 is N or L and X3 is S, K, T or A, are know [sic] in the art". (See, Office Action, page 4.)

The Examiner cites Hallbrink et al., U.S. Pub. No. 2008/0234183 as teaching cell-penetrating peptides comprising an amino acid sequence disclosed in the present specification, i.e., PALKT (SEQ ID NO: 6), and cites Galbraith et al., WO 01/12816, Rose et al., WO 97/04105, and Velicer et al., U.S. Pat. No. 5,976,787, as all disclosing preferred peptides of the present invention included in larger naturally-occurring proteins.

Applicants traverse and request reconsideration and removal of the restriction requirement for the reasons set forth below.

The claims are related as a composition and a method for delivering the composition to a cell. Additionally, as amended, no claims encompass polypeptides that are known in the art or known in the art to be capable of binding to dendritic cells. Novel and nonobvious functional peptides are recited in all groups of the restriction, and therefore a search of any group will reveal all art relevant to the remaining groups. Accordingly, all claims now pending are properly examined together.

### **Conclusion and Election**

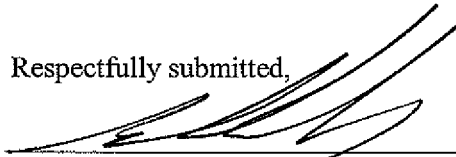
Applicants submit that in view of the foregoing amendments and remarks all the pending claims are seen to relate to a single inventive concept and all share a common structural and functional feature,

and, as such, the claims are properly viewed as relating to a single invention that should not be restricted. Applicants request that the restriction requirement of the Office Action of February 23, 2010 be reconsidered and withdrawn.

Although, for reasons set forth above, Applicants believe that election among restriction groups is uncalled for, and without in any way acquiescing in the reasons for the requirements set forth in the Office Action, but in order to be fully responsive to the Office Action, Applicants elect the claims of Group I drawn to a peptide comprising SEQ ID NO: 1.

In view of the claim amendments herein, reconsideration and removal of the restriction are requested, and examination of all pending claims on the merits is solicited.

Respectfully submitted,



Leon R. Yankwich, Reg. No. 30,237  
David G. O'Brien, Reg. No. 46,125  
Attorneys for Applicants  
YANKWICH & ASSOCIATES, P.C.  
201 Broadway  
Cambridge, Massachusetts 02139  
telephone: 617-374-3700  
telecopier: 617-374-0055

**Certificate of Transmission via EFS-Web**

The undersigned hereby certifies that this correspondence and accompanying documents are being electronically submitted to the U.S. Patent Office on June 23, 2010.

**/David G. O'Brien/**